1884MNRAS..44..282G

Concernant la remarque de M. Gill sur le point de mon mémoire, où j'exprime des doutes sérieux sur la possibilité de parvenir à la connaissance du mouvement absolu de translation du système galactique par des déterminations de la constante de l'aberration en différents endroits du ciel, c'est une question qu'on ne peut, *à priori*, ni démontrer ni nier absolument. Je me bornerai donc à dire, qu'entre les différentes explications qu'on pourrait proposer pour rendre compte des différences entre les valeurs de l'aberration trouvées dans notre série, par des étoiles de différentes ascensions droites, ce ne serait qu'avec la plus grande précaution qu'on puisse accepter celle qui voudrait attribuer les dites différences au mouvement du système galactique. Il me paraît plus probable que les saisons y ont joué un rôle important.

Note to Accompany Correspondence on the Subject of Nyrén's Determination of the Constant of Aberration. By David Gill, LL.D., F.R.S., Her Majesty's Astronomer at the Cape of Good Hope.

Nyrén's recent determination of the constant of aberration with the Prime Vertical Transit Instrument at Pulkowa, and his discussion of the values of the same constant as determined with the Transit Instrument and Vertical Circle of that Observatory, together constitute one of the most interesting and valuable contributions to modern astronomy.

The wonderful agreement of the results obtained by the three instruments in question, from different stars and totally different modes of observation, affords the most striking testimony not only to the genius of the elder Struve, who planned the instruments and methods of work, but also to the zeal and ability of the astronomers who have so efficiently carried on and refined the traditions of high accuracy that have always been associated with the work of Pulkowa. In writing on these and other matters to Otto von Struve I was anxious to obtain further information as to certain points in M. Nyrén's work, because it seemed not improbable that germs of results even still more interesting might be found in it. I accordingly enclosed in my letter the above notes for M. Nyrén's perusal, but without any intention of publishing them in their present form. In reply to these notes M. Nyrén has made some further investigations, the results of which he has kindly communicated to me, and they are so interesting that (with M. Nyrén's consent) I forward them for publication in the *Monthly Notices*.

Downloaded from http://mnras.oxfordjournals.org/ at East Tennessee State University on June 15, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System

1884MNRAS..44..282G

Observations of Comet a 1884, *made at Windsor, New South Wales.*

By John Tebbutt.

On the evening of January 14 I received from the Melbourne Observatory a telegram to the effect that a small comet was found there on the 11th. Its position and daily motion for the 12th were communicated, but owing to clouds and smoke I did not succeed in finding the comet till the 19th. It was then just beyond the reach of unassisted vision. In the telescope it presented itself as a round nebula, about two minutes of arc in diameter, with a bright condensation in the centre. There was no definite nucleus in the micrometer eye-piece, but a short tail could be distinguished. The comet faded very rapidly, and was observed with extreme difficulty on February 2. The accompanying places have been deduced from comparisons made with a square bar micrometer on the $4\frac{1}{2}$-inch equatorial. In bringing up the mean places of the comparison stars from the various authorities the precessions and secular variations have been adopted from Stone's Cape Catalogue. With the exception of star No. 6 no reliable authority exists for proper motion. The proper motion of this star is very large, and has been taken from that Catalogue. I trust at a future opportunity to be able to send a determination of the orbit. Considering the rapid fading of the comet from our view it is probable that the heliocentric motion is retrograde. I commenced observations of Pons' comet on January 13.

Apparent Places of Comet 1884.

Windsor Mean Time. 1884.					R.A.			Log. $\frac{p}{\rho}$	N.P.D.			Log $\frac{q}{\rho}$	No. of Comps.	Comp. Star.
	d	h	m	s	h	m	s	+	°	′	″	+		
Jan.	19	9	37	42	22	54	35·76	8·8669	131	46	56·3	9·6972	6	1
	19	9	37	42	22	54	35·55	8·8669	131	46	56·5	9·6972	6	2
	21	9	26	7	23	5	2·58	8·8712	131	54	59·2	9·6657	4	3
	21	9	31	39	23	5	3·91	8·8701	131	55	2·7	9·6781	5	4
	22	9	3	4	23	9	44·99	8·8735	131	57	21·3	9·6073	8	3
	22	9	3	4	23	9	44·93	8·8735	131	57	19·5	9·6073	8	4
	23	9	22	11	23	14	18·89	8·8726	131	58	45·3	9·6531	5	3
	23	9	22	11	23	14	18·79	8·8726	131	58	43·8	9·6531	5	4
	24	8	51	49	23	18	29·18	8·8729	131	59	15·1	9·5742	5	3
	24	8	51	49	23	18	29·05	8·8729	131	59	12·6	9·5742	5	4
	25	9	14	35	23	22	34·15	8·8734	131	59	19·6	9·6338	1	3
	25	9	14	35	23	22	34·13	8·8734	131	59	18·7	9·6338	1	4
	27	8	50	59	23	29	57·41	8·8727	131	57	33·4	9·5731	2	3
	27	8	50	59	23	29	57·32	8·8727	131	57	31·6	9·5731	2	4
	28	8	56	48	23	33	26·24	8·8731	131	55	54·1	9·5907	4	5
	28	8	56	48	23	33	26·07	8·8731	131	55	50·9	9·5907	4	6
Feb.	2	9	38	9	23	48	48·21	8·8661	131	44	19·1	9·7002	3	7

Downloaded from http://mnras.oxfordjournals.org/ at East Tennessee State University on June 15, 2015

© Royal Astronomical Society • Provided by the NASA Astrophysics Data System